

Regenerative installations for the...

S/128/60/000/010/009/016/XX
A033/A133

cleaned castings during a fixed time interval, by the consumption of core mixture per ton of casting and by other factors. The characteristics of the classifier operation include data on the quantitative distribution of water and solid substances, i.e. the solid-to-liquid ratio. The authors present a detailed description and analysis of the various regeneration installations tested, describe the operation and characteristic features of single units and point out that, according to time study data, the machine time of hydraulic cleaning chambers varies between 34.0 and 62.5%, while the auxiliary time amounts to 20 - 37.1%. If the core mixture consumption is 0.55 - 0.65 tons per ton of casting, the average solid:liquid ratio of the sludge to be regenerated should not be lower than 1:8 = 1:10. If pumps of 150 - 200 atm pressure are used instead of 90 - 100 atm, this ratio should be 1:15 or 1:20. The authors prove the superiority of hydraulic elevators for sludge transportation, enumerating the advantages of this system. They comment upon classifiers and centrifuges used in hydraulic regeneration plants and compare the efficiency and economic effect of the installations operating at various Soviet plants. There are 4 figures and 7 tables.

Card 2/2

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

SOLOMON, L.S.; BOROVIK, M.G.

Letter to the editors. Lit.proizv. no.3:48 Mr '62. (MIRA 1513)
(Foundries--Equipment and supplies)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

BOROVIK, M.G.; MYASIN, N.I.; SOLOMON, L.S.; SHPEKTOR, A.A.

Obtaining pure dust-like molding materials in a jet mill. Lit. proizv.
no.5:16-17 My '62. (MIA 16:3)
(Sand, Foundry--Additives) (Crushing machinery)

BOROVIK, M.G.; SOLOMON, I.S.; SHPEKTOR, A.A.

Analysis of the economic efficiency of wet reclamation of sand
from used foundry mixtures. Lit. proizv. no.12:20-22 D '64.
(MIRA 18:3)

SINYANSKIY, V.I.; SOLOMON, L.Ye.; BERTSELLER, A.S.

Manufacture of forsterite clinkers in rotary kilns. Ogneupory 21
no.6:280-285 '56. (MLRA 9:11)

1. Proyektono-issledovatel'skiy metallurgicheskiy institut v
Bukhareste (for Sinyanskiy, Solomon); 2. Zavod "Trassiya" V gorode
Dezh (for Bertseller).
(Rumania--Clinker bricks)

Solomon, L. Ye.

AUTHORS: Sinyanskiy, V.I., Solomon, L.Ye., Ionesku, P.D. 131-12-9/9

TITLE: Report on Matters Concerning Science and Technical Engineering of Other Countries (Iz inostrannoy nauki i tekhniki). The Functioning of Refractories Made from Forsterite in Forging Furnaces (Sluzhba forsteritovkh ogneuporov v podinalkh kuznechnykh pachey)

PERIODICAL: Ogneupory, 1957, Nr 12, pp. 568-571 (USSR)

ABSTRACT: Forsterite refractories are mainly produced from serpentine raw material. Refractories, the main component of which is forsterite ($2 \text{MgO} \cdot \text{SiO}_2$), have a weaker reaction with respect to iron oxides than the aluminum silicates of the fireclay products, and therefore they are not destroyed so quickly. The refractory lining of forging furnaces is subjected to considerable temperature fluctuations while in operation and also when operation is interrupted, which leads to a destruction of the arched roof of the furnace, and pieces of fireclay bricks fall on to the hearth of the furnace. Table 1 shows the properties of fireclay-magnesite and forsterite refractories. Further, the mineralogical composition of the forsterite is given and its mounting and operation are described in detail. The illustration shows a forsterite hearth brick after the smelting furnace campaign. In table 2 the chemical analyses and the state of the refractory forsterite bricks

Card 1/2

131-12-9/9
Report on Matters Concerning Science and Technical Engineering of Other Countries.
The Functioning of Refractories Made from Forsterite in Forging Furnaces

in various zones after the campaign of a forging furnace hearth are mentioned and explained in detail. Table 3 shows the average duration of the operation of such forsterite hearth linings, and table 4 does the same with respect to hearths of fireclay-, magnesite-, and forsterite bricks. Furthermore, the operation of various types of hearth linings is described in detail and the causes of the destruction are mentioned. There are 1 figure, 4 tables, and 3 Slavic references.

ASSOCIATION: Scientific Metallurgical Research Institute in Bukarest-IChEM
(Nauchno-issledovatel'skiy metallurgicheskiy institut v Bukhareste-IChEM)
Metallurgical Plant imeni 23 August (Metallurgicheskiy zavod im. 23-go avgusta)
Roumanian Peoples' Republic (Rumynskaya Narodnaya Respublika)

AVAILABLE: Library of Congress

Card 2/2

SOLOMON, L.

1832. Manufacture of forsterite refractories—V. I. SINYANSKI, I. E. SOLOMON, and A. I. KUREV (Ogneupor), 22, 125, 1957. In Russian. Prepared forsterite clinker was gap-graded to give 55% grains of 1-3 mm and 45% <0.068 mm; these fractions ensure a finished product of low porosity. Mixing was carried out in an Erich mixer, using 3% sulphite lye as a binder. Friction presses gave satisfactory results (bulk density >2.6 g/cm³), but hydraulic presses are best; pressing presents no difficulties. Keller dryers were used; the bricks required at least 72 hr. drying time. A chamber kiln was satisfactory but firing was not always uniform over the whole setting; a tunnel kiln of max. heat 1.2 m. would be more suitable. Products were fired for 350 hr. at 1,410°, an adequate temperature; 1,600°-1,700° is considered quite unnecessary. Rejects totalled 3% (1% in drying, 2% in firing). Practical applications of these refractories will be discussed in a later paper; in some furnaces forsterite refractories are better than other types. (2 figs., 7 tables)

moto

4
4-462c

PM day

R/002/62/000/002/003/003
D272/D302

AUTHOR:

Solomon, M.

TITLE:

The rediscovery of element 14- silicon

PERIODICAL:

Stiinta si tehnica, no. 2, 1962, 16-18

TEXT: The script of the film "Element 14 - silicon" produced by the "Alexandru Sahia" Studio, and directed by Mircea Popescu has been written by its author for this journal. The film deals with the first discoveries of Si-compounds by prehistoric man and their applications followed by a description of the physical and chemical characteristics of silicon and its compounds; the discovery of new properties of Si compounds is then illustrated, considering the piezoelectric effect, exploited in ultrasonic testing equipment with quartz blades emitting at > 20,000 c/s, as well as the rubber-like properties of the silicones, comprising silicone oils, silicone rubber, and silicone resins; mention is finally made of silicon-boron semiconductors. There are 12 figures. ✓

Card 1/1

STRAT, C., prof.; LUNGU, I., dr.; DRAGAN, Margareta, dr.;
RUSSU, G., dr.; LUNGU, Eugenia, dr.; SOLMON, M., dr.;
MARDARE, G., dr.; POPESCU, N., dr.; CIMPOES, C., dr.;
SELARU, M., dr.

The value of ornithine-carbamyl-transferase in hepatic diseases
of viral origin. Med. intern. 15 no. 6: 673-678 Je '63.

1. Lucrare efectuata in Clinica a II-a medicala, Institutul
de medicina si farmacie, Iasi (director prof. dr. C. Strat).
(HEPATITIS, INFECTIOUS) (HEPATITIS)
(LIVER CIRRHOSIS) (ENZYME TESTS)
(TRANSFERASES)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

SOLOMON, M.

Ledgerary of the 14th element, silicon. St. si Teh Bus 14 no.2:
16-18 F '62.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

SOLOMON, M.; MORARU, S.

Transmission of the viscosity unit through methylpolysiloxane.
Metrologia apl 11 no. 8:380-381 Ag '64.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

Solomon Max

RUMANIA/Atomic and Molecular Physics - Heat

D-4

Abs Jour : Ref Zhur - Fizika, No 3, 1958, No 5716

Author : Solomon Max, Gruzsniczki Filip

Inst : Not Given

Title : Reproduction of the Reference Points of the International Temperature Scale and Calibration of Thermometric Standards in the Laboratories of the Bucharest Institute of Metrology.

Orig Pub : Metrol. apl., 1957, No 6, 42-49

Abstract : Description of a procedure for calibrating the standard platinum resistance thermometer in accordance with the following reference points: melting point of ice and boiling of H₂O, S, and O₂. The values of the resistance are indicated to be 5.6886 ohms, R₁₀₀ = 7.9166 ohms, and R_{444.6} = 15.0827 ohms. A procedure is described for calibrating a standard Pt-Rh -- Pt thermocouple at the points of hardening of silver and gold. The values of the thermal emf are indicated to be E_{Ag} = 9132 microvolts, E_{Au} = 10320 microvolts. The precision of temperature measurements in the principal interval is estimated to be $\pm 0.02^{\circ}\text{C}$, and outside the basic interval it is estimated to be $\pm 0.05^{\circ}\text{C}$.

Card : 1/1

SOLOMON, M.; SCHNEIDER, E.

Analytic apparatus for processing crude oil. Metrologia
apl 10 no.1:34-41 Ja '63.

RUMANIA/Human and Animal Physiology - (Normal and Pathological). T
Blood Blood Transfusion and Blood Substitutes.

Abs Jour : Ref Zhur Biol., No 4, 1959, 17321

Author : Duvan, S., Crivda, S., Ichim, V., Solomon, M.

Inst :
Title : Effectiveness of Intraarterial Transfusion of Oxygenated Blood

Orig Pub : Chirurgiya, 1957, 6, No 5, 751-758

Abstract : In experiments on 3 groups of dogs, oxymetry was performed with the oxymeter of Berg according to the principle of Milligan. Artificial enriching of the blood with O₂ was performed according to the methods of Nikitin, Negovskiy, and Porter, and by means of bubbling. The transfusion of oxygenated blood is not dangerous. The method of Negovskiy gave the best results. The results of correcting decreased oxyhemometric indexes by means of intratracheal introduction of pure O₂ under normal conditions

Card 1/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652220017-5"

RUMANIA/Human and Animal Physiology - (Normal and Pathological). T
Blood. Blood Transfusion and Blood Substitutes.

Abs Jour : Ref Zhur Biol., No 4, 1959, 17321

of respiratory apparatus considerably excel those obtained by means of intraarterial transfusion of oxygenated blood. -- A.D. Zhuchkova

Card 2/2

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

SOLOMON, M.; SCHNEIDER, E.

Dielectric constant measurement of silicone oils and correlation
of results with other values of materials. Metrologia apl 11
no. 2:80-84 F '64.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

SOLOMON, M., chim.

Considerations on the rheometric behavior of some classes of
organic substances. Metrolgia apl 11 no. 5:230-235 My '64.

CENTEA, Alexandra, dr.; MLADIN, Tr, dr.; GHERMAN, Gr., dr.; SOLOMON, O., dr.;
IONESCU, Domitia, dr.; ARDEVAN, A., dr.

Pulmonary tuberculosis in the gastrectomized. Med. intern. 15 no.1:
83-92 Ja '63.

1. Lucrare efectuata in Clinica de ftiziologie, I.M.F. Cluj (director:
prof. L. Daniello).
(GASTRECTOMY) (TUBERCULOSIS, PULMONARY)

STOICA, Gh.; SOLOMON, O.F.; CIOBANU, V.; VASILIU, I.

Investigations of the interaction of the rheumatoid factor
and gamma globulin. II. Inhibition of agglutination of latex
particles. Stud cercet med intern 4 no.3:377-386 '63.
(RHEUMATOID FACTOR) (GAMMA GLOBULIN) (AGGLUTINATION)
(RUBBER) (ARTHRITIS, RHEUMATOID) (SERODIAGNOSIS)

SOLOMON, O. F.

USSR/Chemistry Synthesis processes

Card : 1/1 Pub. 40- 18/27

Authors : Ushakov, S. N., and Solomon, O. F.

Title : About the synthesis of cyclooctatetraene

Periodical : Izv. AN SSSR, Otd. khim. nauk 4, 694 - 706, July - August 1954

Abstract : The effect of various factors on the polymerization reaction of acetylene yield and rate of formation of cyclooctatetraene during the process of catalytic polymerization of acetylene under pressure, was investigated. Polymerization of acetylene into cyclooctatetraene offers best results in the absence of ethylene oxide and calcium carbide. Water traces and some unidentified foreign admixtures contained in the catalyst, were found to be the only inhibitors of the polymerization reaction. The effect of pressure in the reaction vessel on the yield of cyclooctatetraene, is explained. Twenty-four references: 1 USSR; 10 German; 2 English; 11 USA (1911 - 1952). Tables; graphs.

Institution : The Lensoviet Technological Institute, Leningrad

Submitted : July 6, 1953

Solomon, O.

HUNG

✓ Styrene synthesis. O. Solomon. *Rev. chim. (Bucharest)* 5, 5-14 (1964).—Several styrene syntheses are reviewed. The catalytic dehydrogenation of PhEt is discussed in detail. Flow sheets for a proposed industrial installation of the latter are given.

CH

✓ R5

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

Solomon, O.E.

3/200

Polymerization of cyclooctatetraene. S. N. Ushakov and
O. E. Solomon. J. Appl. Chem. U.S.S.R. 27, 895-900 (1954) (U.S. translation). See C.A. 49, 108688.

B. M. P.

①

fest

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

SOLOMON, O.F.

4

1437* (Polymerization of Cyclooctatetraene.) Polymerizatsiya tsiklooktataetraena. S. N. Ushakov and O. F. Solomon. Zhurnal Prikladnoi Khimii, v. 27, no. 9, Sept. 1954, p. 2034. Reaction rate and quantity of catalyst (metallic sodium). Bromination of polymer. Tables, graphs. 5 ref.

SOLOMON, O. F.

7
Cyclooctatetrene polymers. S. N. Ushakov and O. F.
Solomon. U.S.S.R. 104,198. Nov. 25, 1956. Cyclo-
octatetrene is heated with Na. The product is washed with
MeOH, Me₂CO, or other liquid which does not dissolve the
polymer. M. Hesch

3
2
2 may

SOLOMON, CF.

*Cyclooctatetraene. S. N. Ushakov and O. F. Solomon.
U.S.P. 3,035,631, May 26, 1957. The title compd. is
obtained by polymerization of C₈H₈ in the presence of Ni in
dioxane.*

4-4Bd
1-4E4C (i)
1-4E4C
2-Marg
PZ

SOLOMON, O.

RUMANIA/Chemical Technology - Chemical Products and Their Application, Part 4. - Natural and Synthetic Caoutchouc, Rubber.

H-30

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 23408

Author : O. Solomon, I. Popescu

Inst :
Title : Cheap Synthetic Rubber Produced Using Mineral Oil Gases.

Orig Pub : Rev. chim., 1957, No 7, 453-466

Abstract : A comparative economical evaluation of various production methods of butadiene and butadienestyrene rubbers.
The rentability of butadiene production using the butane-bytylene fraction of mineral oil.

Card 1/1

Ozias Solomon, Coman Ionescu and Ion Ciuta (Bucharest), "Darstellung von Vinylcarbazol I," Chemische Technik (Berlin), 9/4, April 1957, pp. 202-4.

The authors of the article, which was received for publication on 5 October 1956, are associates of the Polytechnical Institute, Laboratory for the Chemistry and Technology of Micromolecular Composition, Bucharest.

AUTHORS:

Solomon, O., and Stoicescu, C.A.

RUM/3-9-9-9/25

TITLE:

Polymerization of 2,3-Dimethyl-Butadiene-1,3 With Ziegler Catalysts (Polimerizarea 2,3-dimetil-butadienei-1,3 cu catalizatori Ziegler). First Note (Nota 1)

PERIODICAL:

Revista de Chimie, Vol 9, Nr 9, pp 507 - 509 (RUM), 1978

ABSTRACT:

In this article, the authors present the preliminary results of research and experiments on the polymerization of 2,3-dimethyl-butadiene in the presence of a complex catalyst consisting of diethyl aluminum and titanium tetrachloride. The catalyst was obtained in the reaction medium. The Al/Ti (mol) rate varied between 1.18 and 5.0. Time of reaction was from 10 to 100 hours. Temperatures were 50 and 20°C. The catalyst remnants were removed with alcohol. The obtained product was separated into two fractions by dissolution in benzene at normal temperature. The soluble fraction within the benzene solution was subjected to precipitation with ethanol. The 2,3-dimethyl-butadiene was derived from pinacol. The dimethyl-butadiene had the following physical constants p.f = 69.5 + 0.1°C at 757^{mm} mercury column; d_{20}^{20} = 0.726 + 0.001 g per cm³; and n_D^{20} = 1.4377. The titanium tetrachloride was a 40% benzene sus-

Card 1/2

RUM/3-9-9-9/25
Polymerization of 2,3-Dimethyl-Butadiene-1,3 With Ziegler Catalysts.
First Note.

pension, and the aluminum-diethyl mono-chloride was a 30% benzene solution. To determine the intrinsic viscosity of insoluble fractions obtained in polymerizations at 50°C and at 20°C, the authors used various solvents such as n-hexane, decalin, tetralin, xylene, toluene, and cold and hot carbon tetrachloride, but none of the solvents could solubilize the insoluble fractions. The results are indicated in Tables 1 and 2. There are 2 tables and 9 references, 4 of which are Italian, 1 German, 2 Soviet, 1 English, and 1 Rumanian.

ASSOCIATION: Laboratorul de Chimia si Tehnologia Produsilor Macromoleculari, Institutul Politehnic Bucuresti (Laboratory for the Chemistry and Technology of Macromolecular Products, Polytechnical Institute, Bucharest) ✓

Card 2/2

Sotomayor, O.

Distr: 4E2c(j)

✓ Suspension agents for suspension polymerization. Ozias Solomon and Eugen Nutescu (Polytechnic Inst., Bucharest). 1 (HL)
Bul. inst. polytechnic Bucuresti 20, No. 2, 71-9(1958)(in German).—In vinyl chloride polymerizations a copolymer of vinyl alc. contg. 43% maleic anhydride as the suspension agent is more effective than 5-7 times as much gelatin (in terms of giving a finer suspension), permits polymerization at H₂O-monomer ratios as low as 1.3, and yields a colorless polymer. The copolymer is also more effective than poly(vinyl alc.). J. P. Phillips

Card 1/1

aht

SOLONOV, O.; SARO, M.; BERATLIEF, M.

Foams on the basis of polystyrene. p. 393.

REVISTA DE CHIMIE. (Ministerul Industriei Petrolului si Chimiei si
Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania) Bucuresti.
Romania. Vol. 10, no. 7, July 1959.

Monthly List of East European Accessions (EEA) LC, Vol. 9, no. 1,
January 1960.

Uncl.

SCIOIU, L.; ASLAN, V.; DRAGNE, M.

Macromolecular compounds on the epoxy basis. p. 399.

REVISTA DE CHIMIE. (Ministerul Industriei Petrolului si Chimiei si Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania) Bucuresti. Rumania. Vol. 10, no. 7, July 1959.

Monthly List of East European Acquisitions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

S/081/62/000/009/075/075
B171/B144

AUTHORS: Solomon, Ozias, Cituă, Ion, Sîrbu, Irina

TITLE: On the preparation of the polymers of furfuryl alcohol

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 707, abstract
9R83 (Bull. Inst. politehn. Bucuresti, v. 21, no. 4, 1959,
87-100)

TEXT: The polycondensation of furfuryl alcohol (I) in an aqueous solution (75°C) in the presence of 1-1.5% H₃PO₄, has been investigated. The time needed for forming an emulsion before the start of the reaction is 30 min if (I) contains no furfural and if the molar ratio of (I) and water is 3 : 1. Heating is continued for 20 min, producing a polymer with a viscosity of 200-250 cp. The introduction of formaldehyde in the reaction (the molar ratio of (I) and CH₂O being 1 : 0.6) increases the rate of the polycondensation (15 min.), as well as the viscosity of the polymer (500 cp). In the present case, the purity of (I) has no effect on the rate of emulsification. The polymers are characterized by a high

Card 1/2

S/081/62/000/009/074/075
B171/B144

AUTHORS: Solomon, Ozias, Tomescu, Margareta, Drăgan, Doina, Dimonie,
Mihai

TITLE: Copolymerization of the ternary system: vinyl acetate,
acrylonitrile, styrene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 702, abstract
9R55 (Bul. Inst. politehn. Bucuresti, v. 21, no. 4, 1959,
101-112)

TEXT: The kinetics of the mass copolymerization of vinyl acetate,
acrylonitrile and styrene ($65^{\circ}\text{C} \pm 0.02$) in the presence of 0.5% of
benzoyl peroxide, leading to the formation of a mixture of two- and three-
component copolymers (CP) have been studied. The values, obtained from
an experimental determination of the CP composition were found to be in
good agreement with those calculated by using the composition equation.
The thermal resistance of CP according to Martens was 97°C , the melting
point was $225\text{-}260^{\circ}\text{C}$. [Abstracter's note: Complete translation.]

Card 1/1

S77/582

International symposium on macromolecular chemistry, Novosibirsk, 1960.

Repubblichesky slusharion po makromolekulyarnym issledovaniyam (Novosibirsk, 1960) [A colloquium on macromolecular chemistry held in Novosibirsk, June 1-10, 1960] Reports and summaries. Section 1.1 [Moscow, Izd-vo Akad SSSR, 1960] 160 p. 5,500 copies printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry, Tech. Ed., T. V. Polyakova.

PURPOSE: This collection of articles is intended for chemists and researchers interested in macromolecular chemistry.

CONTENTS: This is Section 1 of a multi-volume work containing scientific papers on macromolecular chemistry in Moscow. The material includes data on the synthesis and properties of polymers, and on the processes of polymerization, copolymerization, polycondensation, and polyrecrystallization. Each text is presented in full or summarized in French, English, and Russian. There are 47 papers, 20 of which were presented by Soviet, American, Hungarian, and Czechoslovakian scientists. No personalities are mentioned. References accompany individual articles.

Hagihara, T., I. S. B. Dolgopolsk, A. G. Churakov, R. A. Kaval'evskaya and N. N. Kurnikova (USSR). The Synthesis of cis- and trans-Diene Polymers on Oxide Catalysts and a Study of Their Structure and Properties 13

Kolobkina, V. V. and N. V. Mironova (USSR). Synthesis and Polymerization of Identified Polyacrylates 47

Bodansky, M., J. Melis, A. Stannettova and V. Zomai (Czechoslovakia). The Structure of Hardened Macrocyclic Polyesters 58

Zillinger, G., J. A. Yerushalmi, and F. M. Tolksdorf (USSR). New Method of Preparation of Polyesters and Their Polymers 64

Bodansky, M. and A. Stannettova (Czechoslovakia). Analysis of Cross-linked Polymers 72

Yanashita, A., T. Ochiai, T. Ueda, T. Saito, T. Kubota and T. Saito (Japan). On the Structure and Properties of Cyclic and the Polymers of the Type of Poly-p-Methylene and Polyphenylacetate 90

Kazanskaya, N. G. (USSR). Cyclic Polymerization and Copolymerization of Dicyclopentadiene 101

Kharchenko, N. A., A. P. Vinogradov, A. V. Tsvetkov, and B. A. Tsvetkov (USSR). Synthesis of Cyclophane Polyisobutylene 118

Abramskaia, L. and Ye. N. Zhdanov (USSR). Polymerization of Polyfunctional Compounds 125

Solomon, O. P., M. Diamond, E. Johnson, and H. Sonnabend (Braunau). Polymerization of Vinylcarbazole in the Presence of Butyllithium and Titanium Chloride Type Catalysts 131

Korshak, V. V., S. I. Sosulin and Y. P. Alferov (USSR). On the Preparation of the New Types of Linear Polymers by the Reaction of Polymerization and Combination 141

Kostylev, I. S., A. V. Vinogradov, and S. G. Dzerzhinskii (USSR). The Synthesis of Organometallic Polymers and S. G. Dzerzhinskii (USSR). The Effect of Combination 152

Kolomnikov, G. S., S. I. Devyatov, and N. V. Klimenova (USSR). Germanium-containing Polymers 156

Spiridonov, G. Yu., S. P. Kedzhina, V. M. Potrebits, D. A. Kochubey, V. A. Gusev, N. G. Likhacheva, N. T. Borisova, and V. P. Borisov (USSR). Organotin Polymers 160

Lotan, H. M., T. M. Kistenev and F. S. Plotnick (USSR). The Effect of Chemical Structure on the Polymerization Activity of the Unsubstituted Organometallic Compounds 167

Vol'kenstein, M. I. (USSR). Cooperative Processes in the Polymerization of Blockpolymers 202

5(3)

R/003/60/011/04/004/041
D0015/D3001AUTHORS: Solomon, O.F.; Dimonie, M.; Tomescu, M.TITLE: Copolymerization of the Vinyl Acetate, Acrylonitrile
and Styrene Ternary SystemPERIODICAL: Revista de Chimie, 1960, Vo¹ 11, Nr 4, pp 204-206

ABSTRACT: The article deals with calculation required to maintain the constant composition in ternary copolymerization. To maintain a compound constant, unless it is an azeotrope, the component reacting best is introduced with a certain velocity into the reacting medium. The introduction velocity is determined by graphic methods. A brief description of the method of calculation in the case of ternary copolymerization is also given in the article. A number of ternary-system copolymerizations was also carried out to verify the theoretical calculation which will be the

Card 1/2

R/003/60/011/04/004/041
D0015/D3001

Copolymerization of the Vinyl Acetate, Acrylonitrile and Styrene
Ternary System

object of a separate article. There are 3 references,
2 of which are English, and 1 unidentified.

ASSOCIATION: Laboratorul de Chimie Macromoleculară al Institutului
Politehnic (Laboratory of Macromolecular Chemistry
at the Polytechnical Institute), Bucharest

Card 2/2

85173

R/003/60/011/009/002/002
A125/A026

The Stereospecific Polymerization and the Isotactic Polymers of Vinylic Monomers
With Heterocyclic Substituents. - Report II. - Polymerization of Vinylcarbazole

the operation procedure and conditions. The authors then describe the installation used for the polymerization (Fig. 2) and the operation procedure. The conversion was determined by a method, which permits the determination of the double connection of non-reacted vinylcarbazole, according to R.V. Martin. The gross isotactic polyvinylcarbazole was fractionated according to the methods recommended by G. Natta (Ref. 10). The authors obtained the following three fractions: 1) A fraction of atactic polyvinylcarbazole soluble in cold carbon tetrachloride, having a melting point of 220°C; 2) a fraction of polyvinylcarbazole soluble in carbon tetrachloride at 60°C and having a melting point of 295°C; and 3) a fraction of polyvinylcarbazole insoluble in boiling carbon tetrachloride, having a melting point of 325°C. The melting point was determined with a "Poldun IV Rathenow" polarization microscope, and the crystalline structure by an X-ray apparatus supplied by the ICECHIM. Based on these experiments, the following results were obtained: The conversion increases rapidly for a lithium-titanium ratio of 6.3 and 1.5 during a time interval of 0 to 30 min (Fig. 4). For a subunitary ratio (0.75) the increase of the conversion in function of the time is very rapid, but stops at 70%. The supra-unitary ratios attain 90%. The re-

Card 2/3

15.8000

S/081/62/000/015/035/038
B171/B101

AUTHORS: Solomon, Ozias, Tomsoiu, Margareta, Demian, Neli, Dimonie,
Mihai

TITLE: Copolymerization of a ternary system: vinyl acetate,
acrylonitrile, styrene. Communication III-a. Emulsion and
suspension copolymerizations

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 15, 1962, 631, abstract
15R26 (Bul. Inst. politehn. Bucuresti, v. 22, no. 3, 1960,
97-109)

TEXT: The kinetics of emulsion and suspension copolymerizations of the
ternary system vinyl acetate-acrylonitrile-styrene have been investigated.
The product of the reaction is usually a mixture of binary and ternary
copolymers. A new method of calculation has been devised, with the help
of which a homogeneous ternary copolymer was obtained. For the previous
communication see RZhKhim. 1962, 9R55. [Abstracter's note: Complete
translation.]

Card 1/1

ACCESSION NR: AP4039549

R/0003/64/015/006/0265/0273

AUTHOR: Solomon, O.; Aslan, V.

TITLE: Stereospecific catalysts

SOURCE: Revista de chimie, v. 15, no. 5, 1964, 265-273

TOPIC TAGS: stereospecific catalyst, polymerization catalyst, olefin polymerization, ethylene, isoprene, propylene, organometallic compound, ionic mechanism, free radical polymerization, metallic alkyl, bimetallic complex, transition metal complex, bond polarity, alkalimet-al-alkyl, alkali metal-aryl, carbazyl-lithium, naphthyl-Li, cyclopentadienyl-Na, alkyl of Al, Be, Zn, Cd, Mg, Sn, Pb, modified Al-alkyl, Ti, Zr, V, Cr, Co, Ni, halide, oxyhalide, alkoxide, acetylacetone, cyclopentadiene derivative, stereoregularity, active center, surface activity

ABSTRACT: The article is an extensive literature review on the subject of olefin polymerization by the use of Ziegler-Natta catalysts at normal pressure to obtain polymers with stereoregularity. The mechanism of reaction in both homogeneous and heterogeneous phase as related to the nature and characteristics of the catalyst employed is reviewed up to 1964.

Card 1/2

ACCESSION NR: AP4039549

ASSOCIATION: Institutul Politehnico Bucuresti (Bucharest Polytechnical Institute)

SUBMITTED: 00

DATE ACQ: 19Jun64

ENCL: 00

SUB CODE: OC

NO REF Sov: 006

OTHER: 116

Card 2/2

STOIA, I., dr.; RIMNEANTU, P., dr.; SOLMON, O.F., dr.; NITESCU, S., dr.;
POITAS, M., dr.

The latex fixation test on plates in the serodiagnosis of
chronic evolutive polyarthritis. Med. intern. 15 no.7:851-855
J1 '63.

1. Lucrare efectuata la Centrul metodologic republican de
reumatologie (director: dr. I. Stoia).
(ARTHRITIS, RHEUMATOID) (SERODIAGNOSIS)

SOLOMON, O.F.; MIKHEYLESKU, Ye. [Mihailescu, F.]; GLINESKI, P. [Glineski, P.]

Analysis of triethylaluminum. Zhur. prikl. khim. 36 no.12:
2712-2719 D'63. (MIRA 17:2)

1. Bukharestskiy issledovatel'skiy khimicheskiy institut i
Politekhnicheskiy institut, Bukharest.

SOLOMON, O.F., GLINESKI, P.; MIKHAYLESKU, Ye. [Micheailescu, E.]

Polymerization of isoprene in the presence of complexes formed
by titanium tetrachloride, triethylaluminum, and amines. Dokl.
AN SSSR 152 no.1:117-118 S '63. (MIRA 1689)

1. Predstavleno akademikom B.A.Kazanskim.
(Isoprene) (Polymerization) (Complex compounds)

SORESCU, A.; PANAITESCU, D.; SOLOMON, P.; HACIG, A.; BELLU, C.

Helmintological studies in the Ostrov quarter of Bucharest.
Stud. cercet. inframicrobiol., Bucur. 6 no.3-4:605-619 July-Dec. 1955.

(HELMINTH INFECTIONS, epidemiol.
in Rumania, distribution in Ostrov quarter of Bucharest)

NITULESCU, V.; POZSGI, N.; SORESCU, A.; PANAITESCU, D.; HACIG, A.;
SOLOVON, P.

Problems connected with helminthological research in mining
regions. Stud. cercet. inframicrobiol., Bucur. 7 no.1-2:
193-202 Jan-June 56.

(HELMINTH INFECTIONS, epidemiol.
in mining regions of Rumania)

(MINING
helminth infect. in miners of Rumania, epidemiol.)

SURNAME (in caps); Given Names

Country: Rumania

Academic Degrees:

Affiliation:

Source: Bucharest, Microbiologie, Parazitologie, Epidemiologie, Vol VI,
No 5, Sep-Oct 1961, pp 439-454.

Data: "The Spread of Geohelminthiasis Through the Intermediary of
Irrigated Plantations."

Authors:

IUPASCU, G., -Prof.- Department of Parazitology of F.P.S.M.F.
] (Catedra de Parazitologie F.P.S.M.F.).

SORESCU, Angela, -Dr.- Department of Parazitology of F.P.S. M.F.

PANAITESCU, D., -Dr.-, Department of Parazitology of F.P.S.M.F.

ANGELESCU, C., -Dr.-, Central "Sanepid" of the Capital (Sanepidul
Central al Capitalei);

HACIG, Alice, Helminthology Section of the "Dr. I. Cantacuzino"
Institute (Sectia de Helmintoologie a Institutului "Dr. I. Can-
tacuzino").

SOLOMON, Paula, Helminthology Section of the "Dr. I. Cantacuzino"
Institute.

LUPASCO, Gh.; SQLOMOI, Paula; HACIG, Alice; CIPLA, Al. Gh.; CIUREA, C.;
IANCO, Larissa.

Research on the role of the reticulo-endothelial system in immunity
in experimental trichinosis. Arch. Roum. path. exp. microbiol. 20
no.3:337-356 S '61.

1. Travail de l'Institut "Dr I. Cantacuzino" Laboratoires
d'Helminthologie, Histopathologie et Chimie parasitaire.
(RETICULOENDOTHELIAL SYSTEM physiology)
(TRICHINOSIS experimental) (IMMUNITY)

TINTAREANU, Justina, dr.; STOIANU, Paula, biolog.

Considerations on the criteria for evaluation of the intra-
dermal reaction in helminthiasis. Microbiologia (Bucur.)
9 (n. 2):189-192 July 1964

l. lucrare efectuata in Sectia de helmintologie din Institutul
de microbiologie, parazitologie si epidemiologie "Dr. I.
Cantacuzino", Bucuresti.

SNIORU, Vlădu, biolog ; T.MIARLANU, Octina, dr.

Aspects of standardization of helminth antigens. Microbiologia
(Bucur.) 9 no.3:193-197 May-June '64

1. Lucrare efectuata in Secția de helmintologie din Institutul
de microbiologie, paraziatologie si epidemiologie "Nr. I. Cantacuzino",
București.

Mugan, Gheorghe; Mihai, Silvia; Niculescu, Mihai, et al. 1964.

Efficiency of some methods of immunobiological diagnosis in
Trichinella spiralis infections. Microbiologia (Bucur.) 9
no.3 p.201-204 My-Je. '64

L. lucrare efectuata in Sectia de helminthologie din Institutul
de microbiologie, parazitologie si epidemiologie "Dr. I. Cantacuzino",
Bucuresti. Membru corespondent al Academiei Republicii Populare
Romane (for Lupașcu).

IUPASCU, Gh., prof.; GHURSCU, Angela, dr.; IANAITESCU, D., dr.; HACIG, Alice,
biolog; SOLAMON, ... , biolog.

Investigations of the role of underground irrigation in the prevention of the pollution, with geohelminth eggs, of the soil of the irrigated cultivated land. Microbiologia (Discur.) 9 no.3
1990-05 My-44 'ci.

1. lucrare efectuata in caietul de helmintologie din Institutul de microbiologie, parazitologie si epidemiologie "Dr. I. Cantacuzino", Bucuresti.

DIPASCO, Gh.; SOLOMON, Paula; HACIG, Alice

Contribution to the study of experimental infection with
Trichinella spiralis. Arch. Roum. path. exp. microbiol. 23
no.4:869-876 D '64.

1. Travail de l'Institut "Dr. I. Cantacuzino", Service d'
Helminthologie. Submitted January 11, 1964.

URBECH, Ch.; MAGIC, Alire; SOLOMON, Paula; IANCO, Larissa

Research on the constitution and specificity of *Trichinella spiralis* antigens. Arch. Roum. path. exp. microbiol. 23 no.4: 677-682 D 1964.

1. Travail de l'Institut "Dr. I. Cantacuzino", Section d'Entomologie et Laboratoire de Chimie Parasitologique. Submitted May 18, 1964.

DEFAUD, M.; HAGIG, Alice; SOLOMON, Paula; TINTAREANU, Justina

Research on the persistence of certain immunobiological reactions
in *Trichinella spiralis* infections. Arch. Roum. path. exp. micro-
biol. 23 no.4:883-888 D '64.

1. Travail de l'Institut "Dr. I. Cantacuzino", Section d'Helmintho-
logie. Submitted May 18, 1964.

LUPASCO, Gh.; SORBESCO, Angela; PANAITESCO, D.; HACIG, Alice; SOLDEN, Paula

Research on the role of underground irrigation in the prevention
of pollution of the soil of the irrigated crops with ~~gastelminth~~
eggs. Arch. Roum. path. exp. microbiol. 23 no.4:889-898 D '64.

1. Travail de l'Institut "Dr. I. Cantacuzino", Section d'Helmintho-
logie. Submitted May 6, 1964.

IUPASCU, Gh., prof.; HACTIG, Alice, biolog; TINTAREANU, Justina, dr.;
SOIOMON, Paula, biolog; SMOLINSKI, M., dr.

Diagnostic methods in trichinellosis. Value of immunobiological
diagnosis in the study of apparent foci in the Rumanian People's
Republic. Microbiologia (Bucur.) 10 no.3:233-244 My-Je '65.

PUBLIC HEALTH

RUMANIA

616-002.951.21-084

LUPASCU, Gh., Prof, TINTAREANU, Justina, Dr, SOLOMON, Paula.
 Biologist, SMOLINSKI, M., Dr, POPA, I., Dr, and COSTIN, Maria.
 Work performed at the "Dr I. Cantacuzino" Institute of Microbiology,
 Parasitology and Epidemiology (Institutul de Microbiologie,
 Parazitologie si Epidemiologie Dr I. Canatcuzino"), Bucharest.

"Aspects Concerning the Organization of a Campaign Against
 Teniasis (Taenia solium)."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 11,
 No 3, May-Jun 66, pp 257-263.

Abstract [Authors' English summary modified]: The authors describe a campaign against teniasis in a town where several cases of Taenia solium had been identified. The campaign involved simultaneous application of three approaches: effective treatment of carriers; determination of the extent of infestation; sanitary precautions and sanitary-hygienic education of the entire population.

Includes 4 tables and 6 references, of which one Rumanian and 5 Western.-- Manuscript submitted 2 August 1965.

1/1

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652220017-5"

RUMANIA / Human and Animal Physiology. Nervous System.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3811

Author : Kapri, M.; Solomon, S.
 Inst : Rumanian Medical Academy, Iasi Affiliate
 Title : The Phasic States of Reflex Excitability in Spinal Cord Inhibition Due to Action of Ultraviolet Rays

Orig Pub : Studii si cercetari stiint. Acad. RPR Fil. Iasi Md.,
 1956, 7, No 1, 31-38

Abstract : The summation phenomena were studied by Sechenov's method on 36 frogs. Following ultraviolet radiation, a short excitation of the spinal cord centers was noted that changed over to a state of inhibition. Drop of excitability of the skin receptors and change in functional state of the spinal cord centers are the mechanisms that take part in the phasic phenomena (corresponding to the development of parabiosis manifestations). -- K. E. Ratner

Card 1/1

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

DIMITRIU,C.C.,Prof.; BERONIADE,V.; SOLOMON,S.

The clinical value of the Romeo test. Romanian M. Rev. 4 no.1:
27-29 Ja-Mr '60.
(KIDNEY FUNCTION TESTS)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

SCICOVIN, S.

Problems of hydrologic forecast. p. 34. ENERGETICA. (Asociatia
Stiintifica a Inginerilor si Tehnicienilor din Romania si Ministerului
Energiei Electrice si Industriei Electrotehnice) Bucuresti. Vol. 4,
no. 1, 1956.

So. East European Accessions List Vol. 5, No. 9 September, 1956

SOLOMON, S

TECHNOLOGY

PERIODICAL: REVISTA TRANSPORTURILOR, Vol. 5, no. 12, Dec. 1958

SOLOMON, S. On the necessity of revising the 'norm of the Hydraulic
Comp tation of Cridges.' p. 550

Monthly List of East European Accesions (EEAI) LC Vol. 8, nb. 4
April 1959, Unclass

SOLOMON, S.

An approximate method for determining the distribution of the flow on the surface of a hydrographic basin. p. 123.

ENERGETICA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania si Ministerul Energiei Electrice si Industrial Electrotehnice) Bucuresti, Rumania, Vol. 7, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

DIMITRIU, C.C., prof.; BULIGESCU, L., dr.; ARSTEANU, L., dr.; SUCIU, Dan,
dr.; TOMESCU, V., dr.; MARINESCU, M.dr.; ANDRONESCU, M., dr.;
SOLOMON, Sela, dr.

The importance of early diagnosis of postviral chronic hepatitis.
Med. inter., Bucur 13 no.5:673-678 My '61.

1. Lucrare efectuata in Clinica medicala a Spitalului "C.Davilla",
I.M.F., Bucuresti.

(HEPATITIS, INFECTIOUS complications)
(LIVER CIRRHOSIS prev. & control) (HEPATITIS diagnosis)

DIMITRIU, C.C., prof.; BULIGESCU, L., dr., candidat in stinte; SOLOMON,
Sela; MACARIE, Olga; GASMET, E.

The hepatic cytolysis syndrome. Med. intern. 14 no.1:1-17 Ja '62.

1. Lucrare efectuata in Clinica medicala a Spitalului "C. Davilla".
(LIVER DISEASES)

NISTOR, Dumitru, ing.; BORSI, Adalbert, ing.; BOLOGAN, V., ing.;
MARGINEANU, E., ing. sef; POCOL, Alexandru; SOLOMON, Tr., ing. sef;
SIMEDREA, T., ing.; JENEI, D., ing. sef

Problems of increasing labor productivity in the mechanical
engineering industry. Probleme econ 16 no.12:149-151 D '63.

1. Director, Uzina Unio--Satu Mare (for Nistor).
2. Sef serv. org. productiei, Uzina Unio--Satu Mare (for Borsi).
3. Director, Uzina Infratirea-Oradea (for Bologan).
4. Uzina Infratirea-Oradea (for Margineanu).
5. Director, Uzina Balanta-Sibiu (for Pocol).
6. Uzina Balanta-Sibiu (for Solomon).
7. Director, I.S.Tehnofrig-Cluj (for Simedrea).
8. I.S.Tehnofrig-Cluj (for Jenei).

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

RUDENSKAYA, I.M.; SOLOMON, Z.M.

Sealing metal and veneer containers. Trudy VMII MP no.5:156-158
'56. (MLRA 9:8)
(Containers) (Petroleum--Transportation)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

RUDENSKAYA, I.M.; SAVENKOV, N.I.; SOLOMON, Z.M.

Sealing joints of old riveted tanks. Trudy VNII MP no.5:159-167 '56.
(MIRA 9:8)

(Tanks) (Petroleum--Storage)

SOLIN MI-KONIUCIU, Irina

RUMANIA

Pharmacist

Institute for the State Control of Medicines and Pharmaceutical Research
(Institutul de Control si de Statal al Medicamentelor si Parfumeriei
Farmaceutice).

Bucuresti, Pharmacy, Revista a Ministrului Apelatelor Medicale
din Republica Populara Romana, No. 9, Vol. I, May 61, pp. 501-503.

"Contributions to the Study of the Quantitative Determination of
Nootropine bromides in Tablets." (Paper Compiled at the Institute for
the State Control of Medicines and Pharmaceutical Research.)

Co-authors: **CUCIUREANU, Elena**

POLANCIU, Maria, Chemist, Institute for the State Control of Medicines
and Pharmaceutical Research.

1062

SIMION-LOMBOU, Irina

RUMANIA

Pharmacist

Institute for the State Control of Medicines and Pharmaceutical Research (Institutul central de control al statului de medicamente si cercetari farmaceutice).

Bucharest, Romania, Revista a Uniunii Societatilor de Stiinte Medicale din RPR, No 16, Vol X, Oct 62, pp 627-629.

"Research to Establish a Method of Dosage of Noprobamate." (Paper compiled at the Institute for the State Control of Medicines and Pharmaceutical Research.)

Co-authors: NICOLA, Maria

NICOLA, Domnica, Pharmacist, Institute for the State Control of Medicines and Pharmaceutical Research.

SOLOMON-IONESCU, I.; ENACHE, St.; WERMESCHER, B.

Contributions to the study of the determination of quinine
injectable quinine-urethane solution. Rev chimie Min petr
13 no.7:433 J1 '62.

SOLOMA-IONESCU, Irina, farm.; ENACHE, Stefania, farm.; CONSTANTINESCU, T., chim.

Contributions to the study of quality conditions for cetazol products. Farm Rum 11 no.11:681-688 N°63.

1. Institutul pentru controlul de stat al medicamentului si cercetari farmaceutice.

RUMANIA

GRINTESCU, Paulina; SOLOMON-IONESCU, Irina.

Bucharest, Farmacia, No 1, Jan 1964, pp 49-53

"Changes and Additions in the Eighth Edition of the Rumanian
Pharmacopoeia, as Compared with the Present Edition."

IANCU, I.; SOLOMON-POPESCU, E.; OLTEANU-ROMANIUC, T.

Contributions to the study of the nature of psychic trauma
and the role of signification in the reactive state of
pathogenesis in childhood. Rev psihologie 9 no.2:177-202 '63.

IANCU, I.; SOLOMON-POPERCHI, E.; GUTMAN-ROMANIU, T.

Studies on the acute psychic trauma in the psychogenic reactions
of the child. Rev psihologie 11 no.1:59-68 '65.

1. Institute of Psychology of the Rumanian Academy. Submitted
December 10, 1964.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

SOLODIK-POLYAKOV, V.

Fourth Congress of Neuropathologists and Psychiatrists in the
U.S.S.R., Moscow, July 1-8, 1963. Rev psihologie 9 no. 4: 591-592
'63.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

RUMANIA

COMOROSAN, S., Dr, GASPAR, Al., Dr, and SOLOMON, Shelly, Bio-
chemist. Work performed at the "Fundeni" Clinical Hospital
(Spitalul Clinic "Fundeni").

"A Biochemical Quantum Model for Genetic Information."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 11,
No 3, May-Jun 66, pp 231-240.

Abstract [Authors' English summary modified]: The authors present
a model for the biosynthesis of proteins in terms of quantum me-
chanics, using Rosen's studies on the applicability of the quantum
theory of relations to the explanation of genetic phenomena. In
the proposed model definite quantum states are attributed to the
nucleic acid molecules, which are "observed" by enzyme systems
that then translate them and apply the corresponding information
to the respective states. The suggested mechanism results in a
number of original hypotheses relating to the biosynthesis of
t RNA and the control mechanism of protein biosynthesis and
avoids several contradictions inherent in the classical protein
synthesis explanations.

Includes one figure and a bibliography with 38 entries, of
which 3 Rumanian, 5 German 26 English-language and 4 other Western.
/1 -- Manuscript submitted 28 February 1966.

SOLONOWSKI, R.

Internal verification of measuring instruments and its importance.

P. Lc - (METROLOGIA APPLICATA) (Bucuresti, Rumania) No. 4, Apr. 1957

SO: Monthly Index of East European Accessions (EIAI) LC Vol. 7, No. 5. 1958

ЧЕРНЫХОВ, А.А.; ЧЕРНОВ, М.Г.; ПОЛОМНИЦЫН, Н.Л.

First find of kimberlites in the eastern part of the Aldan
Shield. Izv.vys.ucheb.zav.; geol.i razv. ? no.3:122-124
Ag '65. (MI 7A 18:11)

1. Всесоюзный аэрогеологический трест.

SOLOMONIK, A.V.

Applicability of block speed governors to motion-picture projectors.
Trudy LIKI no.3:141-151 '55. (MLRA 9:8)

1. Lafedra kineapparatury.
(Governors (Machinery)) (Motion-picture projectors)

SOV/112-58-2-3349

Translation from: Referativnyy zhurnal, Elektritekhnika, 1959, Nr 2, p 239 (USSR)

AUTHOR: Solomonik, A. V.

TITLE: ~~A Method of Investigating Mechanical Filters and the Fundamental Performance of Multilink and Blocking Speed Stabilizers~~
(Metod issledovaniya mekhanicheskikh fil'trov i osnovnyye pokazateli
mehozvennykh i blokiruyushchikh stabilizatorov skorosti)

PERIODICAL: Tr. Leningr. in-ta kinoinzhenerov, 1956, Nr 4, pp 115-127

ABSTRACT: These fundamental performance factors of a speed stabilizer (mechanical filter) are defined: (1) a protection coefficient; (2) mechanical impedance; (3) attenuation of self-oscillations (damping). A method of speed-stabilizer investigating is suggested in which equivalent electric circuits are represented by the schemes of a non-autonomous reversible fourpole. According to this method, the fundamental performance of a multilink and blocking speed stabilizer is considered. Formulae are derived that serve to determine the protection factor, the mechanical impedance, and the self-oscillation

Card 1/2

SOV/112-58-2-3349

A Method of Investigating Mechanical Filters and the Fundamental Performance . . .
damping of the following filters: a 3-link mechanical filter, a 2-link mechanical filter with linear friction in the brake and on the rim of its flywheel, a block-type speed stabilizer with a rigid rocker having one or two moving rollers, and a block-type speed stabilizer acting under the influence of the blocking system only.

Yu. A. V.

Card 2/2

BARBANEL', Simon Rafailovich; BARBANEL', Solomon Rafailovich; KOROLEV,
Nikolay Mikhaylovich; SOLOMONIK, Aron Vul'fovich; TSIVKIN, Mikhail
Vul'fovich; PROVOROV, S.M., kand.tekhn.nauk, red.; EYSTMONT, L.O..
red.; MALEK, Z.N.. tekhn.red.

[Motion-picture projection] Kinoproektionnaya tekhnika. Pod
obshchei red. S.M.Provornova. Moskva, Gos.izd-vo "Iskusstvo,"
1958. 517 p.
(Motion-picture projection)

SOLOMONIK, A.V.

Calculations for multicomponent stabilizers of the speed of motion-picture film. Tekh. kino i telev. no.8:46-53 Ag '58. (MIRA 11:8)

1. Leningradskiy institut kinoinzhenerov.
(Motion-picture projectors)

BARBANEL', S.R.; MELIK-STEPANYAN, A.M.; SOLOMONIK, A.V.

Investigating the wow coefficient of the speed stabilizers
of sound reproducing systems. Trudy LIKI no.8:3-12 '62.
(MIRA 16:6)

1. Kafedra kinofotoapparatury Leningradskogo instituta
kinoinzhenerov.
(Sound—Recording and reproducing)
(Motion-picture projectors—Testing)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

SOLOMONIK, A.V.

Speed stabilizer unit with symmetric rigid arm. Trudy LIKI result 13-23
'64. (MIRA 18/10)

1. Kafedra kinofotoapparatury Leningradskogo instituta kinoshenerov.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

DONBROVSKIY, Oleg Ivanovich; SHCHEPINSKIY, Askold Aleksandrovich;
DUBLYANSKIY, Viktor Nikolayevich; GONCHAROV, Vladilen
Petrovich; IVANOV, Boris Nikolayevich, kand. geogr. nauk;
SOLOMONIK, E.I., kand. ist. nauk, obshchestvennyy red.;
YARYSH, Yu., red.; ISUPOVA, N., tekhn. red.

[How secrets are revealed; sketches on Krasnopal'shchernaya]
Kak raskryvaiutsia tainy; ocherki o Krasnykh peshcherakh.
Simferopol', Krymizdat, 1962. 108 p. (MIRA 15:11)
(Crimea—Caves)

SEDOV, K.R.; SOLOMONIK, G.L.

Dispensary treatment of convalescents from dysentery. Sov. med.
18 no.6:38-40 Je '54. (MLRA 7:6)

1. Iz Stavropol'skoy gorodskoy bol'nitsy Kuybyshevskoy oblasti.
(DYSENTERY, BACILLARY
*convalescents, dispensary service)

SOLOMONIK, I.Sh.

Photorecording of the signals of an artificial earth satellite
on a continuously moving photographic film. Izv. TPI 105:52-
54 '60. (MIRA 16:8)

1. Predstavлено научным семинаром радиотехнического факультета
Томского ордена Трудового Красного Знамени политехнического
института имени Кирова.
(Artificial satellites--Radio observations)

SOLOMONIK, I.Sh.

Selecting the type of receiving intensifying tube for a multi-stage resonance amplifier. Izv. TPI 105:55-58 '60.

(MIRA 16:8)

1. Predstavлено научным семинаром радиотехнического факультета Томского ордена Трудового Красного Знамени политехнического института имени Кирова.

(Amplifiers, Electron-tube.)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5

GOLOMONIK, I.Sh.

The EVM-2 moisture-content meter for lumber. Izv. TPI 100:
174-179 '62. (MIREA 18:9)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220017-5"

SOLOMONIK, N. N.

Chaletzky, A. M., and Solomonik, N. N. - "Investigation of Phytosterin derived by
the Alkaline Hydrolysis of Pine wood lignin". (p. 1134)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1947, Vol. 17, No. 6

SOKOLIN, M.L.; SOLOMONIK, S.S.; TARABRINA, V.M.; SHMELEVA, M.N.

Treatment of pyoderma patients with bicillin-3. Sov.med. 25 no.2:
138 F '41. (MIRA 14:3)

1. Iz polikliniki Ramenskogo meditsinskogo ob'yedineniya, mediko-sanitarnoy chasti tekstil'nogo kombinata "Krasnoye znamya" i gorskoy polikliniki g. Zhukovskogo.
(PENICILLIN) (SKIN--DISEASES)

92165 (1001,1331 only)

88642
S/110/61/000/001/008/023
E194/E455

AUTHORS: Biryukova, A.I., Engineer., Orlovich, T.M., Engineer
and Solomonik, S.S.

TITLE: Characteristics of Winding Wires With Oxide Insulation

PERIODICAL: Vestnik elektropromyshlennosti, 1961, No.1, pp.25-31

TEXT: In recent years there has been a considerable increase in the demand for winding wires that can operate at a temperature of 400 to 500°C. None of the available types of organic insulation can work at this temperature even for a short time. Hence, wires insulated with aluminium oxide film 10 to 20 microns thick produced by anodizing are of particular interest. This method of insulation was suggested long ago but only recently has been developed satisfactorily. Engineers V.Akulichev and P.Gavrilin have built a laboratory equipment for continuous oxidation of aluminium and tri-metallic wires. This article gives the results of investigations of the electrical, insulating and mechanical properties of aluminium and tri-metallic wires with oxide insulation. The structure of oxide insulation is first discussed. If the electrolyte is one that does not dissolve, the oxide, as is the case with boric acid, a thin, non-porous, so-called barrier

Card 1/7

88642
S/110/61/000/001/008/023
E194/E455

Characteristics of Winding Wires With Oxide Insulation

layer is formed, its thickness depending on the forming voltage. This barrier layer has good dielectric properties and is used in capacitors but it is not suitable for wire insulation because it is too brittle. However, the oxidizing electrolyte may be one that dissolves the oxide. Various acids, including boric acid, have this action. The process of film formation is then more complicated. Pores are formed in the barrier layer through which current passes and locally increases the temperature, so increasing the rate of solution. The pores penetrate into the metal and a cylindrical cell of oxide is formed around them. The aluminium remaining between the cylindrical cells is gradually converted into oxide. The structure of the oxide film obtained depends on the type of electrolyte and the value of the forming voltage; formulae have been given for calculating the size of the pores. The film formed by anodizing at voltages greater than 100 V is $\gamma\text{Al}_2\text{O}_3$. Under normal conditions the oxide film is of amorphous structure and only at 1200°C is it converted into corundum, $\alpha\text{Al}_2\text{O}_3$. On hydration (formation of a film in water at a

Card 2/7 ¹⁵

88642
S/110/61/000/001/008/023
E194/E455

Characteristics of Winding Wires With Oxide Insulation

temperature of 80 to 100°C) part of the oxide is converted into the mono-hydrate $\gamma\text{Al}_2\text{O}_3$, which is of large volume and fills up the pores, giving the film all the advantages of a low-porosity coating. Tests were made on wires with impregnated and unimpregnated oxide insulation of the following types: aluminium wires of 0.3 to 1 mm diameter, trimetallic wires of 0.3 to 0.6 mm diameter. On both types of wire the oxide coating was of the porous-cellular structure and was produced by continuous anodizing in baths of sulphuric or oxalic acid using alternating current. Various methods of measuring the thickness of oxide films are described and a method is recommended which gives errors not greater than 20 to 25%. The thickness of the oxide films on the wires investigated by this method ranged from 12 to 20 microns. The layer of oxide, being porous, acts as a matrix of air insulation round the aluminium wire. Breakdown of the oxide film should, therefore, be considered as discharge along the internal surface of the pores. If the relative humidity is low, the surface breakdown voltage coincides with the breakdown voltage of Card 3/7

38642
S/110/61/000/001/008/023
E194/E455

Characteristics of Winding Wires With Oxide Insulation

the air. However, even normal room humidity considerably reduces the surface discharge voltage and when wires with oxide insulation are placed in surroundings of 95 to 98% relative humidity, the breakdown voltage is reduced by 30% in 48 hours. The method of determining the breakdown voltage is described. Instantaneous breakdown voltages were of the order of 600 V, falling after 9 hours to about 400 V. The phenomenon of restoration of electric strength after breakdown is discussed. It occurs because the oxide film itself is not damaged unless a heavy breakdown current is allowed to flow for some time. Whereas the electric strength of enamelled wire falls off rapidly in the temperature range of 120 to 250°C, the electric strength of wire with oxide insulation falls by only 30% at a temperature of 500°C. In practice, the breakdown voltage is independent of temperature and the resistance of the oxide to corona is not reduced at temperatures up to 500°C. The electric strength of the wires tested was every bit as good as that of corresponding wires of foreign manufacture. Insulation resistance was difficult to measure and the value obtained at room temperature depends very

Card 4/7

33642

S/110/61/000/001/008/023
E194/E455

Characteristics of Winding Wires With Oxide Insulation

much on the humidity of the air. The insulation resistance of unhydrated specimens is 2 or 3 times less than that of hydrated specimens under normal ambient conditions, though the two kinds of wire behave identically when tested at high temperatures where no moisture is present. At temperatures of the order of 300°C the insulation resistance of oxide insulated wire, whether with silicone varnish or not, is of the order of 10^3 megohms/metre. A method of checking the continuity of the oxide layer is described; it was frequently used during production. Bending tests are also described. Bending wires around rods which stretch the film by 10 to 25% reduces the breakdown strength to 20% of its initial value. Stretching by 10 to 25% after holding at a temperature of 300 to 500°C reduces the breakdown strength to 30%. Repeated bending tests showed that the elasticity and mechanical strength of oxidized conductors are not so good as those of enamelled types, but are not bad enough to prevent their use as winding wires. When using oxide-insulated conductors the insulation may be stretched up to 25% depending on the electrical

Card 5/7

88642
S/110/61/000/001/008/023
E194/E455

Characteristics of Winding Wires With Oxide Insulation

requirements. Tests of resistance to wear are described; wires with oxide insulation were as good in this respect as enamelled wires. The main disadvantage of winding wires with oxide insulation is the porosity and brittleness of the oxide layer. When used in the manufacture of motors, the wires are protected against mechanical damage, and their resistance to moisture is improved, by applying a protective coating. Silicone varnish is used for this purpose. At room temperature the insulation resistance of the varnished wires is much better than that of the unvarnished oxide insulation, but as higher temperatures are reached the two come to have similar properties. If, after holding for some hours at 400°C, the temperature is reduced to the normal ambient value, the insulation resistance gradually recovers its initial value. Anodized wires varnished with silicone also have high breakdown strength and good resistance to moisture. Accordingly, electric strength tests on these wires can be made in water. After holding for 50 hours at 400°C, the value of the breakdown strength as tested in water was the same as before ageing.

Card 6/7

88642

S/110/61/000/001/008/023
E194/E455

Characteristics of Winding Wires With Oxide Insulation

For further improvement of oxide-insulated wires it is necessary to develop a varnish for an operating temperature of 400 to 500°C. There are 8 figures, 3 tables and 6 references: 4 Soviet and 2 non-Soviet.

SUBMITTED: June 11, 1960

Card 7/7

BIBERGAL', Leonid Anatol'yevich; MAGI, Ervin Alekseyevich;
SOLOMONIK, Samuil Solomonovich; KRANIKHFELOD, L.I., red.

[Cables and wires for electronic apparatus] Kabeli i pro-
voda dlja elektronnoi apparatury. Moskva, Energiia,
1964. 255 p. (MIRA 17:9)